

## 5V / 155 Mbps InGaAs PIN-TIA Receiver

## PT-3300 Series

InGaAs PIN-TIA WITH PIGTAIL

### FEATURES

- ✧ InGaAs/InP PIN Photodiode with AGC transimpedance amplifier
- ✧ Differential ended output
- ✧ Single +5 V operation
- ✧ - 40~+85 °C operation temperature

### DESCRIPTION

PT-3300 series are designed as optical signal receivers with AGC transimpedance amplifier. Their wide dynamic ranges, differential outputs are suited for telecommunications, especially SONET OC-3 / SDH STM-1, Fast Ethernet, and Fiber Channel.

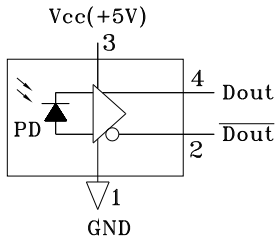
AC / ELECTRICAL AND OPTICAL CHARACTERISTICS (Tc=25°C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Detection Range		1100	1310	1620	nm
G	<a href="#">Gain@10Mbs</a> Differential	$\lambda = 1300\text{nm}$	0.17	-	220	V/mW
BW	Bandwidth	Pf = 1 $\mu$ W	120	140		MHz
Psat	Saturation Power	$\lambda = 1300\text{nm}$	-3	0	-	dBm
Sens	Sensitivity	BER=10 <sup>-10</sup> @155Mbps	-	-38	-36	dBm
Rout	Output Resistance		-	50	65	ohm
	Operation Speed			155		Mbps

DC / ELECTRICAL CHARACTERISTICS (Tc=25°C)					
Symbol	Parameter	Min.	Typ.	Max.	Unit
Vcc	Power Supply	4.5	5	5.5	V
Icc	Supply Current (no load)	-	-	35	mA

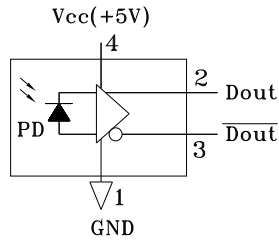
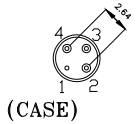
ABSOLUTE MAXIMUM RATING (Tc=25 °C)			
Symbol	Parameter	Value	Unit
V	Voltage	6	V
Topr	Operating Temperature	-40~+85	°C
Tstg	Storage Temperature	-40~+85	°C

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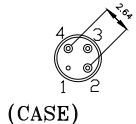
## MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



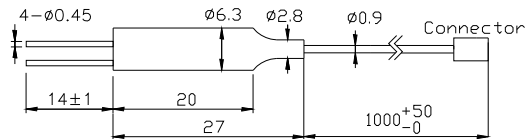
TYPE B



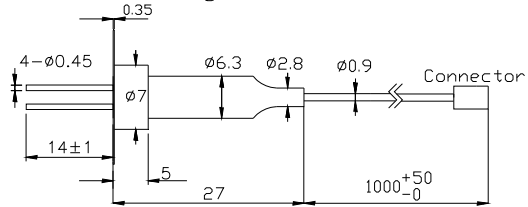
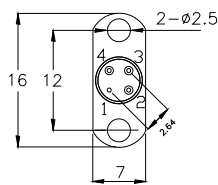
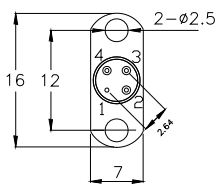
TYPE A



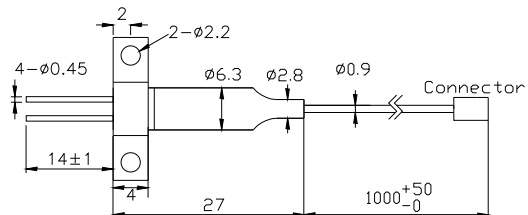
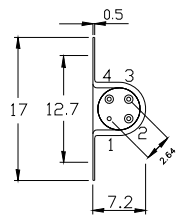
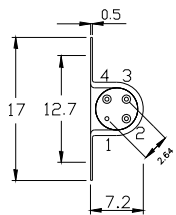
PIN	PIN Assignment	
	TYPE B	TYPE A
1	GND	GND
2	Dout	Dout
3	Vcc(5V)	Dout
4	Dout	Vcc(5V)



Flangeless



Vertical Flange



Horizontal Flange

**Note:** Specifications subject to change without notice.

## ORDER INFORMATION

Part No.: P T - 3 3 0 [ ] [ ] - [ ] [ ] [ ]

Code	Voltage
0	5V
3	3.3V

Code	Fiber
0	SMF, 9/125 $\mu$ m
1	MMF, 50/125 $\mu$ m
2	MMF, 62.5/125 $\mu$ m

Code	PIN Assignment
Blank	Type A
B	Type B

Code	Flange
V	Vertical
H	Horizontal
X	No Flange

Code	Connector
S	SC/PC
F	FC/PC
T	ST/PC
L	LC/PC
X	No Connector
SA	SC/APC
FA	FC/APC
TA	ST/APC
LA	LC/APC

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## Revision History

Version	Subject	Release Date
1.0	Initial datasheet	2002/2/18

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